Puget Sound Recovery

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and Partners

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Necessary and ongoing learning—how to protect and recover Puget Sound

But pressures threaten to overwhelm gains—we are not going to meet most of the 2020 targets

Solution?

Innovation and Partnerships

3 Backbone Roles of the Partnership

- Remove
- Mobilize funding
- Educate decision makers
Backbone role important in VUCA world

- Volatile
- Uncertain
- Complex
- Ambiguous

**Vision:** clear priorities for action

**Understanding:** engaging with partners broadly for global perspective

**Clarity:** seeing essential issues and elements in noisy systems

**Agility:** responding quickly in changing conditions
Opportunity: Engage more of society, drive innovation

- We are coordinating state and federal agencies with local and tribal governments, non-profits

- Need to focus on public-private partnership to increase scope of effort, investments, and innovation
  - Carbon fiber pervious pavement
  - Waste converted to drinking water
  - Many more

Partnerships within the state family – our three Strategic Initiatives leads
STORMWATER: Prevent harm from new development, reduce harm from existing development

- Strategic Initiative Lead: Dept. of Ecology
  - Vince McGowan, Lead for Municipal Stormwater Management

- Status:
  - Most stormwater-related Vital Sign measures are not changing or show mixed results

- Partnership/Innovation Example:
  - Local government, low impact development, and stormwater action monitoring

Habitat: Engage local processes to develop approaches for protection and restoration

- Strategic Initiative Leads: WDFW & DNR
  - Julie Watson, WDFW’s Policy Lead for the Habitat Strategic Initiative
  - Kirsten Feifel, DNR’s Policy Lead for the Habitat Strategic Initiative

- Status:
  - Restoration is making modest gains, but not at the pace needed to achieve targets
  - Rates of forest loss, shoreline armoring, and eelgrass coverage suggest some success in protection, but losses continue

- Partnership/Innovation Example:
  - Sea-level rise adaptation workshops
  - Zooplankton monitoring
• Strategic Initiative Lead: Dept. of Health
  • Emily Sanford, Lead for the Shellfish Strategic Initiative

• Status:
  • Water quality improvements are increasing the area of harvestable shellfish beds, though successes at large growing areas will be needed to achieve target

• Partnership/Innovation Example:
  • Liberty Bay upgrade

Cross-Sector Partner Presenters

• John Stark, WSU Puyallup and Washington Stormwater Center

• Mindy Roberts, Washington Environmental Council

• Monte Marti, Snohomish Conservation District and Puget Sound Conservation District Caucus

• Stephanie Solien, Leadership Council Vice Chair, Puget Sound citizen volunteer
The Washington Stormwater Center was created through a state legislative mandate (R.C.W. 90.48.545) for a stormwater technical and educational resource center for all stormwater permit holders in the state.

A joint center between UW-Tacoma and WSU-P developed in 2010.

Pre-spawn mortality in Coho
Incorporating carbon fibers into permeable pavements (funded by the Boeing Company)
Permeable pavements - a great idea but there are problems

- Do not have the tensile and compressive strength of regular pavements
- Can clog over time if not maintained properly

The WSU engineering team developed the process to incorporate carbon fiber into permeable asphalt and concrete

WSU Puyallup developed the toxicity data
Toxic Sites Cleaned Up
Community Engagement ~
Private Landowner Participation

Monte Marti, District Manager
Snohomish Sustainable Lands Strategy

- Conservation District role ~ bring our communities together
- Innovative partnerships ~ diverse interests ~ common desired outcomes
- Multi-benefit approach
- Agreement around multi-benefit funding
  - Conservation Commission ~ Shellfish/RCPP/CREP
  - DOE Floodplains by Design
  - WDFW Estuary and Salmon Restoration Program
  - Not the only funding leveraged
- Integrating with Results Washington

Innovating for the Future

1. Foster coordination and understanding among diverse interests
2. Develop unique local solutions
• Innovation is critical – R&D focus to address pressures on Puget Sound.
  • Cascadia Innovation Corridor

• Partnerships are critical – Lend us your voice to bridge the gap with other sectors and across the border.
  • Establish a Salish Sea transboundary work group (State/BC)

• Science is critical and real – Affirm our dedication to science-based decision-making, including monitoring programs
  • 2018 Salish Sea Ecosystem Conference
Thank you!

ONSITE SEWAGE SYSTEMS

Indicator:
Inventories, inspections and repairs

![Bar chart showing inspection current and pending over time with 2020 target at 95%]
**SHELLFISH**

Indicator:
Shellfish beds re-opened to harvest

![Graph showing the change in shellfish beds from 2007 to 2020.](image)

- **2020 target:** 10,000 net acres upgraded since 2007

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**SWIMMING BEACHES**

Indicator:
Condition of swimming beaches

![Graph showing the percentage of beaches passing swimming standards from 2004 to 2020.](image)

- **2020 target:** 100% of all monitored beaches meet standards
**PUGET SOUND CHINOOK SALMON**

Indicator:
Spawning population abundance

**ESTUARIES**

Indicator:
Restoration of estuarine wetlands

2020 target = 7,380 acres
EELGRASS

Indicator:
Sound-wide eelgrass area

ORCA

Indicator:
Number of Southern Resident killer whale

2020 target = 95 whales
Southern Resident Orca Census
J, K, and L Pod Census as of July 1 Each Year

Population Count as of 7/1/2017 is 78

** Status of one K pod member is uncertain as of 7/1/2017. Census count will be revised if in subsequent encounters this whale is confirmed to be missing.

Census as of July 1

First Seen in all Three Pods (CWR)
First Missed in all Three Pods (CWR)
JKL Population (CWR)

* Not shown:
  2016 birth and death of neonate born to J33.
  2015 birth and death of female neonate, mother T80.
  2016 neonate born to K27

Primary Sources:
  • Center for Whale Research Orca Survey
  • July 1, 2017 + 2017 Population Estimates
  • Center for Whale Research
  • Killer Whales (John K. B. Ford, Graeme M. Ellis, Kenneth C. Balcomb)